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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,551	04/19/2004	Valery H. Vanstaan	14494	3439
75	590 03/13/2006		EXAMINER	
LISA M. SOLTIS ILLINOIS TOOL WORKS INC. 3600 WEST LAKE AVENUE GLENVIEW, IL 60025			DURAND, PAUL R	
			ART UNIT	PAPER NUMBER
			3721	
			DATE MAILED: 03/13/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/827,551	VANSTAAN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Paul Durand	3721			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1)⊠ Responsive to communication(s) filed on <u>03 Ja</u>	anuary 2006				
,					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
<ul> <li>4) ☐ Claim(s) 1,2 and 4-21 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1,2 and 4-21 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers					
9) ☐ The specification is objected to by the Examiner.  10) ☑ The drawing(s) filed on 4/19/2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1,4-8,11,15,16,19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Nikolich (US 5,115,944).

In claim 1, Nikolich discloses the invention as claimed including a fuel cell comprised of housing 12, having an open end enclosed by closure 20, valve stem 32, having an outlet, disposed in operational relationship to the open end, which reciprocates from an open and retracted position to a closed extended position, a fuel metering valve 16, located within the housing and associated with the valve stem, a fuel metering chamber (generally defined by ribs 48), disposed in close proximity to the closure, which allows a pre measured amount of product through elements 58, the housing having a separate fuel container 14 and the fuel metering valve having associated element 82, disposed within the second container, where the flow of the fluid outside the outlet is solely from the second container (see Figs. 1,4-6 and C3,L17 – C5,L21).

In claim 4, Nikolich discloses the invention as claimed including, the metering chamber having a seal 34, engaging the valve stem

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In claim 5, Nikolich discloses the invention as claimed including clamp ring 82, associated with the valve body, which clamps the container.

In claim 6, Nikolich discloses the invention as claimed including the fuel metering valve having a main seal 34, with the radial valve stem projection 54 engaging the seal (see Fig. 4).

In claims 7 and 8, Nikolich discloses the invention as claimed including biasing element 36, located between the fuel metering chamber and a second end of the valve body for biasing the radial projection 54.

In claim 11, Nikolich discloses the invention as claimed including a valve stem that can be moved to a filling position, by retracting the stem further than the open position while maintaining a communication from the passage 58 and the container.

In claim 15, Nikolich discloses the invention as claimed including a fuel cell comprised of housing 12, having an open end enclosed by closure 20, valve stem 32, having an outlet, disposed in operational relationship to the open end, which reciprocates from an open and retracted position to a closed extended position, the housing having a separate fuel container 14, where the flow of the fluid outside the outlet is solely from the second container (see Figs. 1,4-6 and C3,L17 – C5,L21).

In claim 16, Nikolich discloses the invention as claimed including a fuel metering valve 16, located within the housing and associated with the valve stem, and a fuel metering chamber (generally defined by ribs 48), disposed in close proximity to the closure, which allows a pre measured amount of product through elements 58.

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In regard to claims 19 and 20, Nikolich discloses the invention as claimed including a fuel cell, to be used in a combustion tool (C1,L17-25), comprised of housing 12, having an open end enclosed by closure 20, valve stem 32, having an outlet, disposed in operational relationship to the open end, which reciprocates from an open and retracted position to a closed extended position, the housing having a separate fuel container 14, and the fuel metering valve having associated element 82, disposed within the second container, where the flow of the fluid outside the outlet is solely from the second container and a fuel metering valve 16, located within the housing and associated with the valve stem, a fuel metering chamber (generally defined by ribs 48), disposed in close proximity to the closure, which allows a pre measured amount of product through elements 58 (see Figs. 1,4-6 and C3,L17 – C5,L21).

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2,9,10,12,13,14,17,18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikolich in view of Tsutsui (US 6,202,900).

In claims 2,9 and 10, Nikolich discloses the invention as claimed including valve stem 32. What Nikolich does not disclose is the use of radially enlarged portion, which interacts with a lip seal. However, Tsutsui teaches that it is old and well know in the art

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to provide a pressurized container 11, with valve stem 13, having a radially enlarged portion (defined below 26, in Fig. 1), which engages a lip seal 18, when the stem is in an open position, and defines a fuel passage when the stem is in a closed position and a fuel chamber 21, surrounding the valve stem, the chamber having a first end with main seal 19, engaging the reciprocating stem in a wiping manner (see entire document).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Nikolich with the valve stem and lip seal means as taught by Tsutsui for the purpose of dispensing a fluid from a container.

In claims 12-14,17 and 21, Nikolich discloses the invention as claimed except for specific positioning arrangement of the valve in the various positions. However, Tsutsui teaches that it is old and well know in the art to provide a pressurized container 11, with valve stem 13 that changes position relative to the metering chamber in an open, closed and filling position, the stem having a radially enlarged portion (defined below 26, in Fig. 1), which engages a lip seal 18, when the stem is in an open position, and defines a fuel passage when the stem is in a closed and filling position, the valve body having a slot at the second end, formed between the stem and the seal 18 to communicate with the container during filling and the metering chamber dispensing a measured amount of fuel (see Figs. 1-3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Nikolich with the

valve stem and chamber means as taught by Tsutsui for the purpose of dispensing and refilling fluid from a container.

In regard to claim 18, while the modified invention of Nikolich, through Tsutsui discloses the use of an annular slot arranged on the valve body for refilling, it does not disclose the use of a plurality of slots for refilling. However, the examiner asserts that it would have been an obvious matter of design choice to choose a plurality of slots as opposed to a single slot, since applicant has not disclosed that using a plurality of slots solves any stated problem or is for any particular purpose and it appears the invention would do equally well with the single slot as taught by Tsutsui.

### Response to Arguments

5. Applicant's arguments filed 1/3/2006 have been fully considered but they are not persuasive.

While Marraffino does not disclose dispensing the fluid solely from the second container, this is a new limitation to the claims. As such, a new grounds of rejection in view of Nikolich '944 has been supplied to show anticipation of this limitation.

The examiner does not agree that Marraffino does not disclose a measured amount of fuel. In the broadest reasonable interpretation of the claim, this can encompass the user selecting a measured amount of fuel to be applied, such as by holding a valve stem down for a specified amount of time. Furthermore, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871

(CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). However, in light of the Nikolich, this argument is moot.

Therefore, for the reasons indicated above, the rejection is deemed proper.

### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 571-272-4459. The examiner can normally be reached on 0730-1800, Monday - Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Durand March 6, 2006

Stephen F. Gerrity
Primary Examiner